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(71) Applicant:
SUMITOMO CHEMICAL COMPANY LIMITED
Osaka-shi, Osaka 541 (JP)

(72) Inventors:
• Shimizu, Akiko
Ibaraki-shi, Osaka (JP)
• Hishinuma, Takahiro
Toyonaka-shi, Osaka (JP)
• Higashi, Koji
Ibaraki-shi, Osaka (JP)

(74) Representative:
VOSSIUS & PARTNER
Siebertstrasse 4
81675 München (DE)

(54) Liquid crystal display device

(57) A NW mode TN-LCDs having significantly improved viewing angle characteristics of both display contrast and gray scale inversion, wherein

a optical compensation layer (A) having a characteristic wherein the refractive index in the thickness direction of the film is lower than that in-plane of said film;

a optical compensation layer (B) having optically positive refractive index anisotropy and having a characteristic wherein the principal optic axis thereof is tilted 20 to 70° from the normal direction of the film;

a uniaxial optical compensation layer (C) having optically positive refractive index anisotropy;

a polarizing film (PL);

a liquid crystal cell (LCC);

are laminated in the following order:

(1) PL, A, B, LCC, B, A, PL

or (2) PL, A, B, C, LCC, C, B, A, PL.

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EUROPEAN SEARCH REPORT

Application Number
EP 97 11 8532

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 528 400 A (ARAKAWA KOHEI) 18 June 1996 * column 5, line 18 - column 6, line 7 * * column 20, line 1 - column 21, line 13 * * column 22, line 18 - line 38; figures 1,2,7 *	1,3,4	G02F1/1335
D,A	EP 0 676 660 A (ROCKWELL INTERNATIONAL CORP) 11 October 1995 * page 6, line 38 - page 9, line 17; figure 8; table 1 *	1-4	
P,X	US 5 638 200 A (XU GANG) 10 June 1997 * column 3, line 54 - column 4, line 9 * * column 5, line 12 - column 7, line 23; figures 5,6 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G02F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 May 1998	Examiner Stang, I
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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